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1987/88

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November 1 First Official Estimate
FY...

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STATE OF SOUTH CAROLINA
BOARD OF ECONOMIC ADVISORS
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STATE DOCUMENTS

To: South Carolina Budget and Control Board

Subject: November 1 First Official Estimate for FY 87-88

In accordance with the provisions of Section 11-9-880 of the South Carolina Code of Laws and Section 46, Part II, Act 540 of 1986 (the Appropriation Act of Fiscal Year 1986-87), the Board of Economic Advisors submits the first official estimate for Fiscal Year 1988 revenues of \$2821 million and corresponding quarterly estimates.

These estimates are based on an economic outlook for FY 1987 of more of the same--no recession, but no real strength. The expectation is that the present quarter will reflect good growth but that the January-March 1987 quarter will be weak because of the effects of the Tax Reform Bill. It is assumed that there will be small progress in reducing the federal deficit, and a gradual improvement in the balance of trade and domestic markets, particularly the manufacturing sector. The textile industry will remain fairly stable with no significant employment losses or significant growth. A gradual increase in prices is anticipated with inflation rates moving upward to 3.0%. The current pace of consumer spending will continue with fluctuations before and after the end of the year. Personal income growth is expected to be equal to growth in GNP.

Economic growth should pick up in FY 1988 with nominal personal income growth rates rising to approximately 6.0%. Inflation rates should accelerate to approximately 4.0%. Improvements in the balance of trade should result in an increase in exports from the manufacturing and agricultural sectors. The outlook for the textile industry will remain stable with some improvement anticipated. A reduced federal deficit should keep interest rates relatively low. Real growth is expected to be in the range of 2.0 - 2.5%.

The outlook translates into an increase in FY 1988 revenues to \$2821 million over FY 1987 revenues of \$2680.3 million, which were reevaluated as part of the process of arriving at the FY 1988 estimate. This represents a difference of \$97.8 million from the Appropriation Act figure of \$2778.1. A follow-up report will be made to the Budget and Control Board at its next meeting when approval of these estimates will be requested.

Board of Economic Advisors
J.A.M.

October 31, 1986

TABLE I

GENERAL FUND REVENUES
Forecast 1986-87 and 1987-88
In Millions of Dollars

	ACTUAL 1985-86	REVISED 1986-87	ESTIMATE 1987-88
TOTAL GENERAL FUND	2509.3	2680.3 (1)	2821.0 (1)
Total Regular Sources	2468.2	2637.5 (1)	2778.0 (1)
Sales Tax	893.3	950.3	1013.0
Individual Income Tax	907.3	986.8	1066.0
Corporation Income Tax	185.0	199.0	213.0
All Other	482.6	501.4 **	486.0
Miscellaneous Sources	41.1	42.8	43.0
Education Improvement Fund	222.0 *	237.6 *	253.25 *
Interest on Education Improvement Fund	2.2	1.8	1.8
TOTAL	224.2	239.4	255.05
	<u>RATES OF CHANGE</u>		
TOTAL GENERAL FUND		6.8%	5.2%
Total Regular Sources		6.9	5.3
Sales Tax		6.4	6.6
Individual Income Tax		8.8	8.0
Corporation Income Tax		7.6	7.0
All Other		3.9	-3.1
Miscellaneous Sources		4.1	0.5
Education Improvement Fund		7.0	6.6
Interest on Education Improvement Fund		-18.2	0.0
TOTAL		6.8	6.5

(1) Net of Education Improvement Fund.

* One-fifth of total sales tax.

** The changeover from an annual to a quarterly reporting system with the enactment of new insurance premium and retaliatory tax law will result in a one-time five quarter collection for the Insurance Tax, amounting to a \$16.4 million windfall in FY 1986-87.

TABLE II

TOTAL GENERAL FUND REVENUES
QUARTERLY ESTIMATES
Fiscal Years 1986-87 and 1987-88
(In Millions of Dollars)

	FY 1986-87 -----	FY 1987-88 -----
FIRST QUARTER	695.8	716.5
SECOND QUARTER	1374.3	1424.6
THIRD QUARTER	1995.5	2093.2
FOURTH QUARTER	2680.3	2821.0

PERCENT OF TOTAL REVENUES
COLLECTION BY QUARTER

	FY 1986-87 -----	FY 1987-88 -----
FIRST QUARTER	26.0	25.4
SECOND QUARTER	25.3	25.1
THIRD QUARTER	23.2	23.7
FOURTH QUARTER	25.5	25.8

Board of Economic Advisors
October 31, 1986

REVENUE FORECASTING PROCEDURES
BOARD OF ECONOMIC ADVISORS
FISCAL YEAR 1988

The procedures and methodology of the Board of Economic Advisors in the preparation of the first official revenue forecast for Fiscal Year 1987-88 involved five major stages: 1) providing the economic background and setting at the national and State levels for the revenue forecasts; 2) reconciling the April 15, 1986 Board of Economic Advisors Estimate for Fiscal Year 1986-87 with Legislative adjustments in Part 1, Section 128 of Act 540 of the 1986 Appropriation Act; 3) interpreting recent and historical elasticities; 4) analyzing the outputs of the SCOPE Model under alternative scenarios, and 5) interacting with officials of other states with responsibility for revenue forecasting.

Board members individually and collectively had meetings as in previous years with experts and professional economists for economic intelligence gathering. These included a meeting on September 11, 1986 with Richard W. Ellson, Ph.D., Senior Research Economist and Associate Professor of Economics, University of South Carolina; Harold H. Harris, Jr., Ph.D. and Mark S. Henry, Ph.D. of the Department of Agricultural Economics and Rural Sociology, Clemson University; and Christine Chmura, Associate Economist, Federal Reserve Bank of Richmond. A second meeting on October 17, 1986 took place with Roy H. Webb, Economist and Research Officer, Federal Reserve Bank of Richmond; Ryan C. Amacher, Ph.D., Dean of the College of Commerce and Industry, Clemson University; Richard W. Ellson, Ph.D., Senior Research Economist and Associate Professor of Economics, University of South Carolina; and James N. Young, Chief Economist, BellSouth Corporation, Atlanta, Georgia, in which the outlook for the economy of the nation, South Carolina, and the textile and other significant industries in the State was discussed. A third meeting on October 22, 1986 provided interaction between Board members and David A. Wyss, Senior Vice President and Financial Economist of Data Resources, Inc. The resources of the national forecasting groups by which the SCOPE Model is driven, Data Resources, Inc. and Evans Economics, Inc., were available on-line as well as in hard-copy reports weekly and monthly to Board members. Materials from a variety of sources--international, national and state publications--were also made available to Board members. In addition, there was Board interaction with key officials of other states at the 41st National Association of Tax Administrators Meeting on State Revenue Estimating in Las Vegas, Nevada on October 26-29, 1986.

The preparation of the economic forecast involved many meetings between July 1 and November 1, 1986 with preliminary estimates, modifications and refinements of estimates.

Board of Economic Advisors
October 31, 1986

BRIEF OVERVIEW OF THE SCOPE MODEL

The SCOPE (South Carolina Operations Planning and Evaluation) Model was initiated in 1972 in the Office of Chief Economist (originally in the Governor's office). It was designed and operates as a policy and forecasting tool for top level executive, legislative and management decision making. SCOPE is an econometric model designed to reflect the South Carolina economy and to forecast the performance of major economic variables in the State, particularly tax revenues, employment and income. The model is based on a framework of economic activity in the State relative to national economic activity. Approximately 85 exogenous national variables are currently taken from three leading national forecasting services (Data Resources, Inc., Chase Econometrics, and Evans Economics, Inc.).

The SCOPE core model consists of 63 equations, of which 55 are stochastic* and 8 are identities. SCOPE attempts to reflect the diversity of the South Carolina economy by including 20 industrial sectors of manufacturing and nonmanufacturing employment, and a series of equations for wages, personal income, unemployment, taxable sales and State tax revenue.

Durable Manufacturing Employment

The durable manufacturing employment block consists of 6 stochastic equations for the major industries in the State as reported by the South Carolina Employment Security Commission. The employment equations for each separate industry are expressed as a function of a national consumption expenditure index appropriate for that particular industry, a national industrial production index corresponding to that industry and the national level of employment in that industry. The durable employment forecasts include the following industries: Lumber and Products, Stone, Clay and Glass, Fabricated Metal Products, Electrical and Nonelectrical Machinery, and Other Durables which includes Furniture and Fixtures, Instruments and Related Products.

Nondurable Manufacturing Employment

The nondurable manufacturing employment block consists of 7 stochastic equations for the major nondurable industries in the State. Like the durable block, the employment equation for each industry is expressed as a function of a national consumption index appropriate for that particular industry, a national industrial production index for that particular industry and the national level of employment in that industry. Employment forecasts are available for each of the following nondurable industries: Food and Kindred Products, Textile Mill Products, Apparel, Paper, Printing and Publishing, Chemicals, and Other Nondurables, such as Rubber and Miscellaneous Plastics Products.

* Stochastic is defined as a type of modeling for time series analysis explaining future probability from historical experience.

Nonmanufacturing Employment

The nonmanufacturing employment block is disaggregated into 7 stochastic equations: Construction, Transportation and Public Utilities, Services, Trade, Finance-Insurance-Real Estate, State and Local Government, and Federal Government. Employment growth in these industries is specified as functions of State population, national employment in these industries and national consumption indices.

Personal Income

The personal income block is composed of 11 equations, one equation for the unemployment rate, and 10 additional equations for each of the 10 major components of personal income as published by the Bureau of Economic Analysis, Department of Commerce. These equations are specified as functions of their respective national and State income and employment variables. In addition, equations are estimated for wage and salary disbursements for all major industries and are specified as functions of national wage trends and State employment levels.

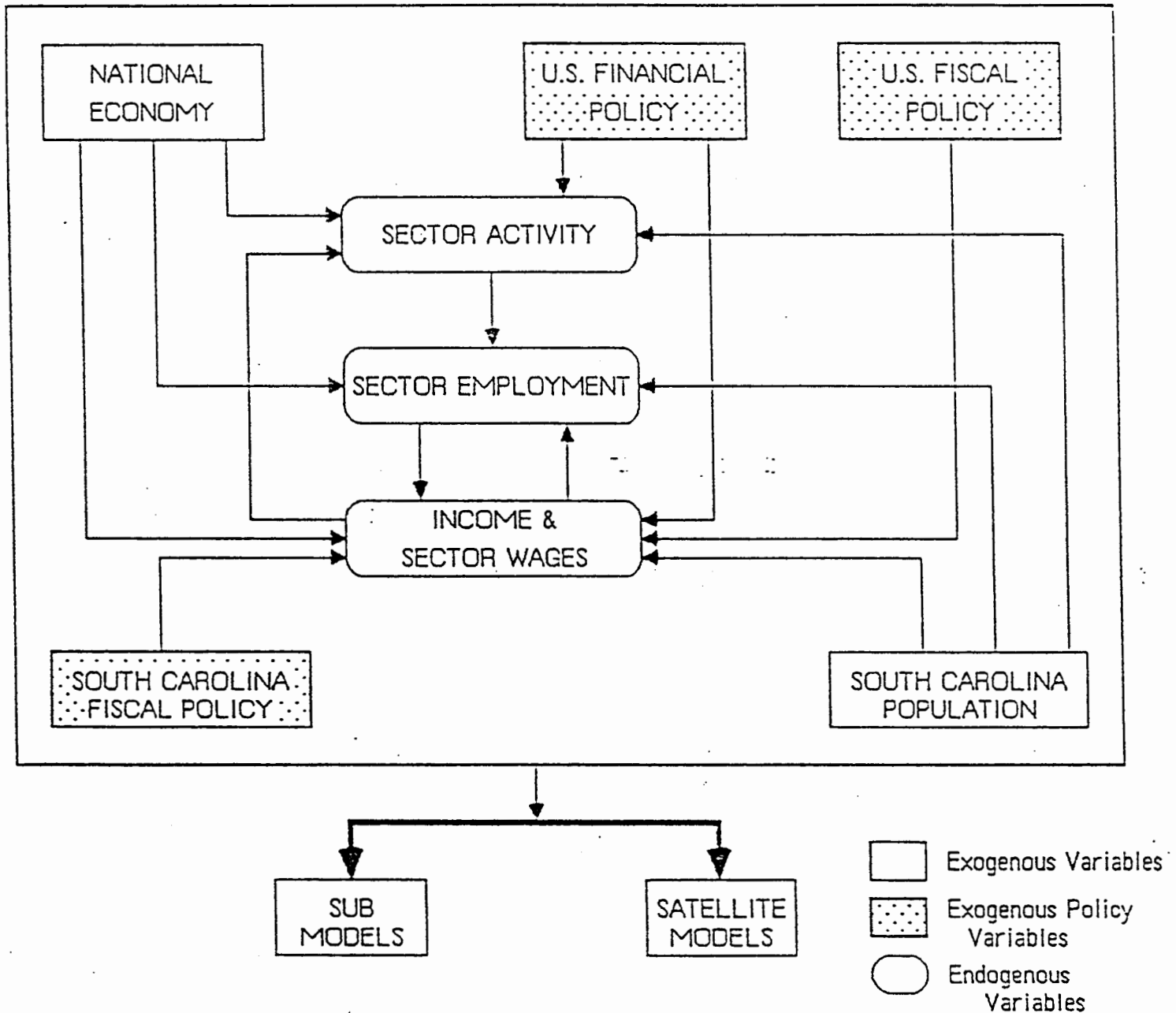
Revenues

The revenue section of the model emphasizes 4 major stochastic Regular Revenue Sources equations: 1) South Carolina corporate income tax, 2) South Carolina individual income taxes, 3) South Carolina retail sales tax, and 4) all other taxes. These equations are individually specified as functions of aggregate employment and income with their respective coefficients and constants. In addition, there are 2 stochastic equations for taxable sales and refunds.

Board of Economic Advisors
October 31, 1986

SCOPE MODEL

SOUTH CAROLINA OPERATIONS, PLANNING & EVALUATION MODEL



Board of Economic Advisors
October 31, 1986